

CLAIMS

- 1 1. A sand screen for use in production of hydrocarbons from wells, comprising an intelligent
2 completions device disposed in the sand screen.
- 1 2. The sand screen of claim 1, wherein the intelligent completions device comprises a
2 sensor.
- 1 3. The sand screen of claim 1, wherein the intelligent completions device comprises a
2 temperature sensor.
- 1 4. The sand screen of claim 1, wherein the intelligent completions device comprises a
2 pressure sensor.
- 1 5. The sand screen of claim 1, wherein the intelligent completions device comprises a flow
2 rate measurement device.
- 1 6. The sand screen of claim 1, wherein the intelligent completions device comprises a
2 oil/water/gas ratio measurement device.

1 7. The sand screen of claim 1, wherein the intelligent completions device comprises a scale
2 detector.

1 8. The sand screen of claim 1, wherein the intelligent completions device comprises a sand
2 detection device.

1 9. A gravel pack system, comprising:
2 a sand screen; and
3 an intelligent completions device disposed within the sand screen.

1 10. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a sensor.

1 11. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a temperature sensor.

1 12. The gravel pack system of claim 9, wherein the intelligent completions device comprises
2 a pressure sensor.

1 13. The gravel pack system of claim 9, wherein the intelligent completions device is selected
2 from a flow rate measurement device, an oil/water/gas ratio measurement device, a scale
3 detector, and a sand detection device.

- 1 14. The gravel pack system of claim 9, further comprising a fiber optic cable.
- 1 15. The gravel pack system of claim 9, further comprising a control line connected to the
2 intelligent completions device.
- 1 16. The gravel pack system of claim 15, wherein the control line is selected from an electric
2 line and a fiber optic line.
- 1 17. The gravel pack system of claim 9, further comprising a control line extending from the
2 surface to the intelligent completions device.
- 1 18. A method for placing a gravel pack around a completion, comprising:
2 gathering data from an intelligent completions device disposed in a sand screen of the
3 completion; and
4 flowing a gravel slurry into the assembly wherein a gravel is deposited between the sand
5 screen and a formation.
- 1 19. The method of claim 18, wherein the intelligent completions device is a sensor.
- 1 20. A method of monitoring a well characteristic of a well, comprising:
2 running a control line to an intelligent completions device disposed in a sand screen;
3 running the sand screen into the well; and
4 sending a signal through the control line.

1 21. The method of claim 20, wherein the intelligent completions device is a sensor.

1 22. A well completion, comprising:

2 a sand screen positioned adjacent the formation; and

3 a fiber optic line at least a portion of which is attached to the sand screen.

1 23. The well completion of claim 22, further comprising a gravel pack around the sand
2 screen.

1 24. A method for gravel packing a well, comprising:

2 running a sand screen into a particular length of the well;

3 extending a fiber optic line into the particular length of the well; and

4 gravel packing the well.

1 25. The method of claim 24, further comprising performing the running step at substantially
2 the same time as the extending step.

1 26. The method of claim 24, further comprising performing the running step before the
2 extending step.